



Supplemental Figure S1: Working Model of *A. baumannii* GI Tract Colonization. The following model is based on observations from this study. *A. baumannii* utilizes free SC to enhance colonization of the mucous layer along the luminal surface of the intestinal epithelium (top). The host, through constant transcytosis of pIgR, generates free SC following cleavage of the receptor at the luminal surface of the intestinal epithelium (left). Binding of dimeric IgA speeds the process of transcytosis and pIgR cleaved at the luminal surface remains associated with dimeric IgA through disulfide bonding, subsequently generating SIgA (middle). In the lumen, *A. baumannii* may either interact directly with free SC to facilitate mucosal colonization (low efficiency), or secrete TrxA in response to host SIgA to remove SC from dimeric IgA (top) neutralizing the protective barrier function of the immunoglobulin and providing increased concentrations of free SC to facilitate mucosal colonization (high efficiency; right).